

22 Sep 1992

TE4GN-C

TESTER, HIGH POTENTIAL

1. GENERAL. This procurement requires an ac and dc tester capable of testing insulation dielectric strength by applying high voltage to a test sample and measuring the resulting leakage current.

2. CLASSIFICATION. Type II, Class 6, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of providing ac and dc test voltage outputs and shall monitor voltages and currents within the minimum ranges, accuracies, and sensitivities specified below.

3.1 Test voltages. 0 to 10 kVac, 0V to 25 kVdc, continuously adjustable.

3.2 Breakdown leakage current. 5 mA maximum at any test voltage.

3.3 Voltage monitor. The equipment shall be provided with a meter to indicate the test voltage. Range: 0 to 25 kV in two or more ranges. Accuracy: $\pm 2\%$ of range.

3.4 Current monitor. The equipment shall be provided with a meter for monitoring output current. Range: 0 to 5 mA in two or more ranges. Accuracy: $\pm 2\%$ of range.

3.5 Overload circuit. The equipment shall be provided with a current overload circuit that has a continuously adjustable sensitivity range of 50 uA or less to a maximum breakdown current of 5 mA.

3.5.1 Failure indication. An audible and visible indication of test item insulation breakdown shall be provided.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 575W.

4.2 Weight. 20 kg (44 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.